

Enfield Clean Energy Newsletter

The Committee

The Enfield Clean Energy Committee is a Town Committee made up of Enfield Residents interested in promoting Clean Renewable Energy.

The team members:

Jeff Myjak—Chair
Ray Gwozdz - V. Chair
Virginia Higley
Steve Moriarty
Greg Mark
Doug Lombardi

LIAISONS :

Town Council:
Tom Kienzler
William (Red) Edgar

Staff:
Joel Cox

Interested in joining our team? Send a note to CleanEnergy@Enfield.org and we will send you an application.



Points:

When we reach 200 points, we will be 1 step closer to getting a 2kw solar system.

Each Clean Option purchase is worth 1 point. Each Solar or Geothermal system is worth 3points.

Clean Option Points	172
System Points	90
Total Points	262

Volume 2, Issue 2

February 2013

Energy Expo — February 9, 2013

What was once the Enfield Clean Energy Expo is now the North Central CT Energy Expo. It will be held on Saturday February 9th at JFK Middle School on Raffia Rd. from 9 AM to 3 PM.. There will be hourly door prizes and seminars.

Seminars will include “How much insulation should I have?”, “What is TAG?”, “I have solar panels, are there any safety precautions I should take?”, and “Geothermal, what is that?”.

There will be solar exhibitors, geothermal and biomass exhibitors. There will be companies there that will come in and perform a Home Energy Audit. These audits cost \$75 for elec-

tric and natural gas customers and will save the average homeowner over \$200 a year.

Other exhibitors include Financing companies to a company that makes a biomass fuel from horse manure (how much more renewable can you get). There will be

insulation companies and home improvement companies.

Admission is free and there will be loads of door prizes. Some of the door prizes include Bio-Bricks (made from Horse Manure) with starters to a FREE Home Energy Audit.

Can we store Electricity to transform the Grid?

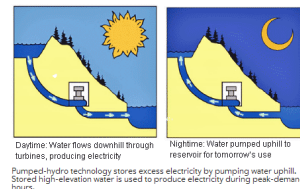
It may come as a surprise that the electricity we use is generated real time. When you turn on a light or turn on your tv, that electricity is being generated right now. But that doesn't have to be. Why not store electricity for when we need it?

Adding energy storage to the electric grid would improve its reliability and permit the widespread utilization of intermittent renewable energy. However, the present cost of grid-scale storage technologies remains prohibitive. To overcome this barrier, the U.S. Department of

Energy has set an ambitious long-term cost goal of \$150/kWh for battery energy storage—about one third the estimated cost of existing commercial battery systems.

Despite the present prohibitive cost of storage, large-scale grid storage has been used in the United States since 1930, when the Connecticut Electric Light and Power Company built the first American pumped-hydroelectric storage facility. The Connecticut pumped-hydro plant used excess electricity to pump water from the Housatonic

River into an enormous water reservoir 230 feet above. During peak electric demand hours, the stored water was fed downhill through a hydroelectric turbine to produce electricity.



Today, pumped-hydro dominates the U.S. energy storage .. See “Store Electricity” on pg2.

CLEAN ENERGY OPTION FAQ'S

Q: Winter will soon be upon us. Can I still get a Home Energy Audit?

A. Yes. There is enough time to get an energy audit. For \$75, a preapproved company will come out, change your incandescent bulbs, put in weather stripping and caulking and perform several other heat saving functions. Call 1-877-WISE-USE to schedule an audit today.

Q. I want to reduce my electric rate, how do I do that? How do I switch suppliers?

A. On the website www.CtEnergyInfo.com, click on "Choose an Electric Supplier". From there click on "Compare Generation Suppliers". When you are choosing, look at variable rates and cancellation fee's. It will take up to 2 billing cycles to switch once you have made your choice.

Q: I have a question that may be of interest to your readers. Is there a place where I can send it?

A. Yes. Send it to cleanenergy@enfield.org.

The Truth About ICE Dams

Nothing signifies a New England winter like long icicles hanging from a home. As iconic as this might be, there is nothing beautiful about the potential damage they can cause to your home. Excessive icicles indicate ice dams, which can create costly water damage to your roof, attic, insulation, and interior walls and ceilings. Ice dams occur when melted snow on the roof runs down the slope of the roof until it refreezes as it reaches the colder surfaces at the eaves.

When the ice dam forms it blocks water and forces it underneath roof shingles and penetration occurs inside the home. This can lead to expensive repairs of damaged ceilings and walls, and replacing of insulation. It also can be a serious health hazard if it causes mold to form.

According to the This Old House, "Stopping ice dams is simple, in principle: just keep the entire roof the same temperature as the eaves. You do that by increasing ventilation, adding insulation, and sealing off every possible air leak that might warm the underside of the roof. By taking care of these trouble spots you should enjoy a winter free of dams and use less energy."

A good first step to fixing your problem is a Home Energy Solutions (HES) assessment of your home. Qualified technicians will diagnose your energy problems and give you a list of steps to take to prevent ice dams and make your home more energy efficient. If you have already had a HES visit, our energy advisor

can refer you to a qualified insulation contractor and answer your questions about ice dams. You can c o n t a c t h i m at energyadvisor@ctenergychallenge.com.

Thanks to "Neighbor to Neighbor" for this article.



Store Electricity (continued from Pg 1)

landscape: 95% of U.S. grid storage capacity was pumped-hydroelectric in 2011. Nevertheless, energy storage is still just a tiny part of the grid system, making up just 2% of U.S. electric generation capacity. So, what's standing in the way of further pumped-hydro development?

Pumped-hydro requires a large elevation difference between suitable water reservoir sites, like the site of the Connecticut storage plant. Furthermore, a huge volume of water is re-

quired to store energy. These difficulties don't make further development of pumped-hydro impossible—just impractical and expensive.

Consider the illustrative example of West Texas. With its enormous swath of wind farms, West Texas could benefit from some energy storage capacity. However, pumped-hydro is a not a feasible option in drought-prone and geographically flat West Texas. Incidentally, the state of Texas has invested nearly \$7 billion in new transmission

lines to pump West Texas wind energy to eastern cities in real time.

While pumped-hydro is not the solution to the electricity storage problem, there are a number of emerging technologies that could one day break our electricity-on-demand paradigm.

For more information, go to <http://blogs.scientificamerican.com/plugged-in/2012/12/19/guest-post-can-we-store-electricity-to-transform-the-grid/>

